## ABSTRACT

## A METHOD AND APPARATUS FOR STEAM CRACKING HYDROCARBONS

Α method apparatus for cracking and steam hydrocarbons, which method consists in heating a mixture of hydrocarbons and steam to a desired temperature that is high enough to crack the hydrocarbons and transform them into olefins, the method being characterized in that the source of energy needed for heating the mixture is supplied essentially by cogeneration using combustion of a fuel to produce simultaneously both heat energy and mechanical work which is transformed into electricity by an alternator, and in that the mixture is initially subjected to preheating using the heat energy supplied by the cogeneration, and is subsequently heated to the desired cracking temperature by means of electrical heating using the electricity supplied by cogeneration.

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